

## **Lower and Middle Carboniferous oil-bearing limestones of southeastern Tatarstan and reconstruction of the paleoenvironment of their formation**

Morozov V.

*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

---

### **Abstract**

The study of Lower and Middle Carboniferous limestones within the eastern flank of the Melekes Depression and the South Tatar Arch allowed us to reconstruct their formation environment. Bioclastic phyto- and zoomorphic limestones occur as wide zones parallel to the shoreline. Therefore, lithogenetic typification of limestones was used for the stratification of Tournaisian and Visean deposits. Serpukhovian and Bashkirian zoogenic, clastic, and pelitomorph limestones formed away from the shoreline. Such deposits are represented by biogenic buildups (possibly, biostromes), fan limestones, synsedimentary crushing (clastic) limestones, and interbiostrome deposits (pelitomorph limestones). Therefore, their horizon-scale stratification is impossible. Commercial oil pools in the carbonate part of the section are confined to bioclastic zoomorphic limestones subjected to secondary leaching. The confinement of leaching to the lithogenetic limestone types mentioned above is related to their composition (shell remains and calcite cement). Shell remains making up the rock skeleton are protected against leaching by the organic material that prevents rocks from compaction. © Pleiades Publishing, Inc. 2007.

<http://dx.doi.org/10.1134/S0024490207010075>

---